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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,147	12/17/2001	Alain Silvestre	600.1204	8232

23280 7590 07/26/2004

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EXAMINER	
NASH, BRIAN D	

ART UNIT	PAPER NUMBER
3721	14

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/026,147	SILVESTRE, ALAIN	
	Examiner	Art Unit	
	Brian D Nash	3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-16,18 and 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-16,18 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 December 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Examiner's Comments

1. This action is in response to applicant's request for continued examination and amendment received 11 December 2003. Applicant has amended claims 1, 6, 19 and cancelled claim 2. The pending claims are now 1, 3-16, and 18-19.

Drawings

2. This application, filed under former 37 CFR 1.60, lacks formal drawings. The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings. In unusual circumstances, the formal drawings from the abandoned parent application may be transferred by the grant of a petition under 37 CFR 1.182. Figure 2 and other handwritten markings need to be corrected.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 3-11 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,578,052 to Engel et al in view of DE 197 43 020 to Hofer et al and further in view of US 4,061,326 to Proudman. Engel et al disclose the invention substantially as claimed including a

device for analyzing fold deviations, the device having sensors (3) that recognize rectangular markings (I, II, III, see Figs. 1-2) applied to a printed product (see column 1, lines 49-65 and column 6, claim 7) on opposite sides at the edge of the product wherein the device evaluates signals from the markings and adjusts folding positions accordingly. Specifically, Engel et al disclose a device that creates a "switch state" via the sensors wherein a position of the fold, determined by sensing of the front edge, relative to the markings is recognized (see column 3, lines 16 to column 4, line 20). Engel does not disclose an analyzing device for fold deviations for printed products conveyed in a shingle stream. However, Hofer et al show a separating device for printed products conveyed in a shingle stream.

In view of Hofer, it would have been an obvious to one having ordinary skill in the art at the time of the invention to have combined the separating apparatus with the device for analyzing fold deviations for the purpose of automating the analysis of folding accuracy thereby making it faster and more reliable.

Engel et al also do not show an analyzing device that determines deviations via a time lag calculation. However, Proudman teaches the use of sensors to measure a time interval (see Proudman, column 1, lines 34-44) for determining fold position accuracy.

In view of Proudman, it would have been obvious to one having ordinary skill in the art to have used the method of measuring the time interval between signals generated by the markings with the device combination of Engel et al and Hofer et al for the purpose of analyzing fold position accuracy.

Regarding claims 9-10, the examiner notes that little patentable weight has been given to the product since no further structural limitations for the analyzing device are defined and it

would appear that claimed invention would perform similarly regardless of the overlapping product covering a portion of the markings.

Regarding amended claim 19, please not that the additions to claim 19 do not further limit the structure of applicant's invention. Specifically, the invention comprises a device for analyzing the positional accuracy of a fold for conveyed printed products, the device comprising sensors for recognizing contrast changes as well as an evaluation device connected to the sensors in order to evaluate the data from such sensors. What the contrast changes indicate do not further limit the structure of the device.

5. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,578,052 to Engel et al, DE 197 43 020 to Hofer et al, and US 4,061,326 to Proudman as applied to claims 1-11 and 18-19 above, and further in view of US 6,086,522 to Hechler. As discussed above in paragraph 6 of this office action, Engel, Hofer, and Proudman disclose the invention substantially as claimed, but do not disclose the use of software for determining at least one of the mean speed, the time lag, and the analysis for determining the folding accuracy via detection of at least one fold deviation. However, Hechler teaches the use of a programmable microprocessor (hence the use of software) in combination with a closed-loop control circuit for positional accuracy of a folding station (see Hechler, column 2, line 51 to column 4, line 11).

In view of Hechler, it would have been obvious to one having ordinary skill in the art to have used the programmable microprocessor in combination with the device combination of Engel, Hofer, and Proudman for the purpose of analyzing fold deviations in a yet faster and more reliable manner.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Nash whose telephone number is (703) 305-4959. The examiner can normally be reached on Monday – Thursday from 8 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached at 703 308-2187.

The fax number for this Group is: 703-872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.

Brian D. Nash
21 July 2004

EUGENE KIM
PRIMARY EXAMINER